



# भारत का राजपत्र

## The Gazette of India

प्राधिकार से प्रकाशित  
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No. 11] NEW DELHI, SATURDAY, MARCH 12, 1988 (PHALGUNA 22, 1989)

इस भाग में चिन्हांपूर्ण संख्या वाली चर्ताएँ हैं जिससे कि यह अलग संकलन के रूप में रखा जा सके।

(Separate page is given to this Part in order that it may be filed as a separate compilation)

### भाग III—खण्ड 2

#### (PART III—SECTION 2)

पेटेंट कार्बालिम द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस

[Notifications and Notices issued by the Patent Office Relating to Patents and Designs]

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Calcutta, the 12th March 1988

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Patent Office, (Head Office),  
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All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

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APPLICATION FOR PATENTS FILED AT  
THE HEAD OFFICE

234/4, ACHARYA JAGADISH BOSE ROAD  
CALCUTTA-20

Calcutta, the 12th March 1988

The dates shown in the crescent brackets are the dates claimed under Section 135, of the Patents Act, 1970.

The 3rd February 1988

92/Cal/88. Trutzschler GmbH & Co. Kg. A device for the detection of foreign bodies, like metal parts, wires or similar things within or between the textile fibre flakes.

93/Cal/88. NGK Insulators Ltd. An anticorrosive insulator.

94/Cal/88. GNB Batteries, Inc. Method for assembling battery cell elements.  
[Divisional dated 1st December, 1984].

The 4th February 1988

95/Cal/88. Shri Abhoy Pada Dutta and Shri Biswajit Poddar. A precision temperature controller for a diffusion furnace.

96/Cal/88. Hoerbiger ventilwerke Aktiengesellschaft. Compressor unit comprising a screw compressor or the like.

97/Cal/88. Lucky Ltd. A process for the preparation of pyrethroid type ester compounds.

98/Cal/88. Vitebsky Tekhnologichesky Institut Legkoi Promyshlennosti. Single warp-knitted pile fabric.

99/Cal/88. McNeilab Inc. Gelatin coated caplets and process for making same.

The 5th February 1988

100/Cal/88. E. I. Du Pont De Nemours and Company. Shrimp feed.

101/Cal/88. Nauchno-Proizvodstvennoe Obiedinenie Po Sozdaniyu I Vypusku Sredstv Avtomatizatsii Gornykh Mashin. System for transmission and reception of remote control signals.

102/Cal/88. Kaunassky Politekhnichesky Institut Imeni Antanasa Snezhkusa. Device for measuring rate of oxygen consumption by microorganisms in liquid media.

103/Cal/88. Nabisco Brand Inc. Process for making reduced calorie multi-textured cookies.  
[Divisional dated 6th March, 1985].

104/Cal/88. Westinghouse Electric Corporation. Improvements in or relating to apparatus and method for preventing relative blade motion in steam turbine.

105/Cal/88. Westinghouse Electric Corporation. Improvements in or relating to apparatus for preventing clogging of rotary combustors by low-melting temperature metal.

106/Cal/88. Westinghouse Electric Corporation. Improvements in or relating to automatic combustion control for a rotary combustion.

The February 1988

107/Cal/88. Dr. Niharendu Bikas Sinha. Process for the preparation of novel composition of chelates for detoxification of toxic metal poisoning in food and drinking water in human, animal.  
[Divisional dated 11th October, 1984].

108/Cal/88. Eaton Corporation. Method for producing near net ring gear forgings.

109/Cal/88. Eaton Corporation. Method for producing ring gears for heavy duty drive axles.

110/Cal/88. Eaton Corporation. Method for producing a family of forged ring rolling preforms and forging die therefor.

111/Cal/88. E. I. Du Pont De Nemours and Company. Polyester fiberfill and process.

112/Cal/88. The Air Preheater Company, Inc. Heat transfer element assembly.

The 9th February 1988

113/Cal/88. Brilcut Patentanstalt. Cement. (Convention dated 11th February, 1987) U. K.

114/Cal/88. Societe Francaise De Munitions. Penetrating Projectile with hard core and ductile guide and method of making it.

The 10th February 1988

115/Cal/88. Hoechst Aktiengesellschaft. Water-soluble azo compounds, processes for their preparation, and their use as dyes.

116/Cal/88. Kabushiki Kaisha Nissin Seisakusho. Roundness processing method and its device for slipper surface of rocker arm.

117/Cal/88. Vsosojuzny Nauchno-Issledovatelsky I Experimentalny Institut Po Pererabotke Khimicheskikh Volokon. Foam composition for printing and dyeing of textile materials.

118/Cal/88. Injectall Limited. Devices and apparatus for injecting gas into high temperature liquids, E. G. metal melts. (Convention dated 18-2-1987) U. K.

119/Cal/88. Industrial Technology Research Institute. Low pressure air assisted fuel injection apparatus for engine.

120/Cal/88. McCormick & Company, Incorporated. Method and apparatus for treating fresh vegetable products.

#### SPECIAL NOTICE

Patent Office Journal, 1981 has been Published and copies of the same may be purchased from the Controller of Publications, Civil Lines, Delhi-110 054 at Rs. 193.50 per copy (Inland) or £ 22.57 or \$ 69.66 (Foreign).

#### CORRIGENDUM

In the Gazette of India, Part III, Section 2, dated 17th October, 1987 under the heading "Complete Specification Accepted" on page 1100, column 2 in respect of Patent Specification 161181 For Application No. 208/Mas/84, Read Application No. 280/Mas/84.

APPLICATION FOR PATENTS FILED AT THE  
PATENT OFFICE BRANCH  
MUNICIPAL MARKET BUILDING, III RD FLOOR  
KAROL BAGH, NEW DELHI-110 005.

The 4th January 1988

1/Del/1988. Kailash Narayan Vakil, "Improvement in and relating to outlet discharge pipe of syphonic system".

2/Del/1988. Kailash Narayan Vakil, "Self-starting syphonic system for flushing water closet urinal and the like".

3/Del/1988 American Colloid Company, "Process for extruding and acid treating clay for improved filtration".

The 5th January 1988

4/Del/1988. Arjun Narang, "Coolant for radiators and heat exchangers, used for cooling up all kinds of internal combustion engines".

5/Del/1988. Krishan Gopal Khosla, "Improved air drier".

6/Del/1988. Lone Star Industries Inc., "Cement composition curable at low temperatures".

7/Del/1988. Societe De Conseils De Recherches Et D' Applications Scientifiques (S.C.R.A.S.), "New 5-oxy derivatives of tetrahydrofuran". / (Convention date 27th January, 1987) (U.K.).

The 6th January 1988

8/Del/1988. Norman M. Schulman, "Umbilical cord clamp and cutters".

9/Del/1988. Teledyne Industries Inc., "Thread cutting tools".

The 7th January 1988

10/Del/1988. Whirlpool Corporation, "Drive system for automatic washer".

11/Del/1988. The Gillette Company, Safety razors". (Convention dates 9th January, 1987 & 7th April, 1987) (U.K.).

The 8th January 1988

12/Del/1988. La Compagnie Viticole Et Fermiere Edmond Et Benjamin De Rothschild S.A. "Process for obtaining alcoholic beverages from vegetable juice".

13/Del/1988. Shell Oil Company, "Method for controlling blasting operations".

The 11th January 1988

14/Del/1988. Rajendra Prasad Gupta and Rashmi Rekha Gupta, "Method for preparing food products from legumes and other such seeds".

15/Del/1988. Dr. Manoj Rai Mehta, "Measuring contact angle (Manoj gonioscope)".

16/Del/1988. Funke Waermeaustauscher Apparatebau GmbH, "A plate heat exchanger".

The 12th January 1988

17/Del/1988. Central Electronics Limited, "A non cumulative independent counter".

18/Del/1988. Central Electronics Limited, "An encoder".

19/Del/1988. Central Electronics Limited, "Level crossing warning system".

20/Del/1988. Seong-Do Moon, "Electric fan apparatus".

21/Del/1988. Exxon Chemical Patents, Inc., "Catalysts, method of preparing these catalysts and polymerization process wherein these catalysts are used".

22/Del/1988. UOP Inc., "Separation of citric acid from fermentation broth with a non-zeolite polymeric adsorbent".

23/Del/1988. Michael Schenk, "A crank mechanism".

24/Del/1988. Exxon Chemical Patents, Inc., "Catalysts, method of preparing these catalysts and method of using said catalyst".

/ The 13th January 1988

25/Del/1988. Shri Ram Fibres Limited, "An Improved process for the treatment of leather".

26/Del/1988. Fred O. Barthold, "Source volt-ampere/load volt-ampere differential converter".

27/Del/1988. Warner-Lambert Company, "Razor with blade protection means and facial treatment".

28/Del/1988. Warner-Lambert Company, "Twin blade razor with dual cleaning means".

The 14th January 1988

29/Del/1988. Piaggio & C.S.P.A., "Automatic transmission for vehicles in general".

30/Del/1988. Silicon Graphics, Inc., "Dual clock shift register".

31/Del/1988. Silicon Graphics, Inc., "Computer system for converting a higher resolution image to a lower resolution image".

32/Del/1988. Storage Technology Corporation, "Automated cartridge system".

The 15th January 1988

33/Del/1988. The M. W. Kellogg Company, "Method for sub-cooling a normally gaseous hydrocarbon mixture".

34/Del/1988. The M. W. Kellogg Company, "Method for partial condensation of hydrocarbon gas mixtures".

35/Del/1988. Armstrong World Industries Inc., "Surface covering product".

36/Del/1988. The M. W. Kellogg Company, "Method for atomizing and injecting hydrocarbon oil for a catalytic cracking zones".

APPLICATIONS FOR PATENTS FILED AT  
THE PATENT OFFICE BRANCH  
61, WALLJAH ROAD, MADRAS-600 002

The 18th January 1988

27/Mas/1988. Parameswaran Pillai, Sivasankara Pillai. A process for the decolourisation and detoxification of rayon and paper pulp mill effluents employing waste liquor from limenito beneficiation plants or pickling liquor from iron pickle units.

28/Mas/1988. Ole-Bendt Rasmussen. Process and apparatus for compressive transverse stretching of polymeric sheet material. (January 16, 1987; Great Britain).

29/Mas/1988. Merlin Gerin. Latching operating mechanism of a three-position circuit breaker.

30/Mas/1988. Sturm, Ruger & Company, Inc., Rifle floor plate latch.

31/Mas/1988. George Barry Bolland. Weight sensing apparatus.

The 19th January 1988

32/Mas/1988. The Dow Chemical Company. Process for preparing pigmentary titanium dioxide.

33/Mas/1988. Uhde GmbH. Process and process unit for separating ammonium nitrate and/or nitric acid from vapours obtained in an ammonium nitrate plant.

34/Mas/1988. Atochem. Process for destroying at least one chlorinated product containing more than two carbon atoms.

35/Mas/1988. Institut Francais Du Petrole. Process and apparatus for performing chemical reactions under pressure in a multi-stage reaction zone with external intermediary thermal conditioning.

36/Mas/1988. The Dow Chemical Company. Ethylene acrylic acid type interpolymer compositions and films having increased slip and reduced block.

37/Mas/1988. Reeves Brothers, Inc., Method for forming thermoformable polyurethane foam articles.

The 20th January 1988

38/Mas/1988 Atochem. Process for purifying anhydrous aluminium chloride containing at least one chlorinated organic product.

39/Mas/1988. The Research Foundation of State University of New York. Insect traps.

40/Mas/1988. Weirton Steel Corporation. Container end-wall structure.

- The 21st January 1988  
 41/Mas/1988. Alimak AB. Method and equipment for thin ore mining.  
 42/Mas/1988. Hans Georg Huber. Device for removing material screened or filtered out of a liquid flowing in a channel.  
 43/Mas/1988. McD Test Systems Inc. Apparatus and methods for sensing fluid components.  
 44/Mas/1988. Motorola Inc. Automatic if tangent lock control circuit.  
 45/Mas/1988. Davy McKee (London) Limited. Process. (February 6, 1987; United Kingdom).

APPLICATIONS FOR PATENTS FILED AT  
 THE PATENT OFFICE BRANCH  
 61, WALLAJAI ROAD, MADRAS-600 002

The 25th January 1988

- 46/Mas/1988. Lucas-TVS Limited. A Ballasted ignition coil for use in automobiles.  
 47/Mas/1988. Southern Petrochemical Industries Corporation Ltd. A process and apparatus for the reduction of hexavalent chromium in chromium (VI) bearing streams to trivalent chromium.  
 48/Mas/1988. TVS-Suzuki Limited. A combined cush drive and freewheel transmission system for a moped.  
 49/Mas/1988. Lucas Industries Public Limited Company. Brake Actuator. (January 24, 1987; United Kingdom).  
 50/Mas/1988. Air Products and Chemicals, Inc. Injection molding process with reactive gas treatment.  
 51/Mas/1988. Cassella Aktiengesellschaft. Mixtures of monoazo dyestuffs.  
 52/Mas/1988. Casella Aktiengesellschaft. Mixtures of monoazo dyestuffs.

The 27th January 1988

- 53/Mas/1988. Atochem. Process for condensing aluminium.  
 54/Mas/1988. Dow Corning Corporation. High voltage insulators (December 14, 1987; Canada).  
 55/Mas/1988. Graf & Cie. A. G. A card clothing for flats of a carding machine.  
 56/Mas/1988. Maschinenfabrik Rieter AG. A winding apparatus for forming a lap from a fibrous web. (Divisional to Patent Application No. 20/Mas/85)

The 28th January 1988

- 57/Mas/1988. V. K. Enterprises Co. Ltd. Quick-release resealable beverage can cover assembly.  
 58/Mas/1988. Salzgitter Maschinendau GmbH. Drilling device with hydraulic percussion generator.

The 29th January 1988

- 59/Mas/1988. TI Corporate Services Limited. Vehicle exhaust gas systems.  
 60/Mas/1988. Motorola, Inc. Trunked communication system for voice and data.  
 61/Mas/1988. A. H. Robins Company Incorporated. N-(Aryl-, Aryloxy-, Arylthio-Arylsulfinyl-and Arylsulfonyl-) Alkyl-N, N'-(OR N'N') Alkylaminolalkyl ureas and Cyanoguanidines.  
 62/Mas/1988. Dow Corning Corporation. Crosslink silicone coating for botanica seeds (January 11, 1988; Canada).

- 63/Mas/1988. Atochem. Process for condensing aluminium.  
 64/Mas/1988. Dow Corning Corporation. High voltage insulators (December 14, 1987; Canada).  
 65/Mas/1988. Graft & Cie. AG. A card clothing for flats of a carding machine.

COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed along with the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

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A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

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CLASS : 40-F. 161981  
 Int. Cl. : B 65g-53/00.

CLOSED APPARATUS PROVIDING POTENTIAL FLUIDISATION FOR HORIZONTALLY CONVEYING POWDER MATERIALS.

Applicant : ALUMINIUM PECHINEY, 23, RUE BALZAC 75008, PARIS, FRANCE.

Inventors : 1. JEAN-PASCAL HANROT, 2. JACKY VOLPELIERE.

Application No. 1287 Cal/83 filed October 20, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

6 Claims

A closed fluidization apparatus providing fluidisation for conveying powdered material contained therein to at least one region to be supplied, which comprises, between said two regions, at least one horizontal or inclined conveyor provided with fluidisation means, formed by a lower gas flow duct, an upper duct for flow of the power material and the gas, with a porous wall being disposed between the ducts, and at least one pipe for supplying the lower duct with gas, for establishing a pressure  $P_f$ , characterised in that the conveyor which is used for potential fluidisation of the powder material filling the conveyor for conveying the powder has at least one balancing column and the height of filling of which balances the pressure  $P_f$  of the fluidisation gas.

Compl. Specn. 16 pages.

Drgs. 2 sheets.

CLASS : 40-D &amp; F.

161982

Int. Cl. G 01 n 33/00.

## OXYGEN PROBES SUITABLE FOR DETECTING THE OXYGEN CONTENT OF AN ATMOSPHERE.

Applicant : CERAMTECH LIMITED, OF 23RD FLOOR, AMP BUILDING, 140 ST. GEORGES TERRACE, PERTH 6000, WESTERN AUSTRALIA, AUSTRALIA.

Inventor : 1. HERMANN KARL SMITH.

Application No. 1388/Cal/ 83 filed November 14, 1983.

Convention dated 17th November, 1982 (PF 6848) Australia.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 12 Claims

An oxygen probe suitable for detecting the oxygen content of an atmosphere, comprising first electrical conductor means exposed to the atmosphere, second electrical conductor means protected from the atmosphere, and an oxygen sensitive element electrically connecting the first and second conductor means, said oxygen sensitive element being electrically connected to the first conductor means at a first portion exposed to the atmosphere and to the second conductor means at a second portion shielded from the atmosphere, and third electrical conductor means for sensing the temperature of the oxygen sensitive element, each of the conductors having a known composition and being same or different based on application requirements.

Compl. Specn. 17 pages.

Drgs. 3 sheets.

CLASS : 39-C + 123.

161983

Int. Cl. : C 01 c 1/00; C 05 c 1/00.

## APPARATUS AND PROCESS FOR MAKING AMMONIUM NITRATE SALT SOLUTIONS FROM AMMONIA.

Applicant & Inventor : JOHN ALVIN EASTIN, OF P.O. BOX 389, GRANT, NEBRASKA 69140, UNITED STATES OF AMERICA.

Application No. 37/Cal/ 84 filed January 17, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 14 Claims

Apparatus for making ammonium nitrate salt solutions from ammonia comprising a burner for oxidizing ammonia to form nitrogen oxides; a first mixer connected to a source of water and to said burner for receiving and for mixing the nitrogen oxides with water to form nitric acid and nitric oxides by reaction of at least a portion of the nitrogen dioxide and water; a reactor; a conduit connected to the reactor and mixer for guiding substantially all of the remaining nitrogen oxides and substantially all of the nitric oxide formed by the reaction of nitrogen dioxide with water to the reactor; said reactor being connected to a source of water and a source of ammonium hydroxide and adapted to react the nitrogen oxides in the reactor with a water solution of ammonium hydroxide to form ammonium nitrite in solution; a second mixer connecting the reactor and the first mixer for combining the nitric acid and the ammonium nitrite to form ammonium nitrate by oxidation of the ammonium nitrite; a column, the source of ammonium hydroxide being connected through a valve to the reactor to flow the ammonium hydroxide through the reactor containing the oxides at a flow rate through the reactor of less than 0.5 gallons per minute per square foot of reactor cross section.

Compl. Specn. 108 pages.

Drgs. 5 sheets.

CLASS : 173-B.

161984

Int. Cl. : B 05 b 1/00.

## A SPRAY-DISCHARGE DEVICE FOR A DEFORMABLE CONTAINER.

Applicant : INTERSCENTS N. C., OF 6. J. B. GORSI-WAREG, CURACAO, NETHERLANDS ANTILLES.

Inventor : 1. DONALD WORKUM.

Application No. 404/Cal/84 filed June 13, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 18 Claims

A spray-discharge device for a deformable container in which a pressure is developed for expelling a liquid from the container via an eductor tube and in which a partial vacuum is created in order to suck air into said container through a common orifice formed through a rigid cover which closes the container, wherein said device comprises a valve unit which is capable of moving axially within the container with respect to the container cover between a spray-discharge position and an air-suction position, said valve unit being adapted to support a member for shutting-off the eductor tube in its air-suction position and being provided with a valve cap having an external face which is applied against an internal face of the container cover in the spray-discharge position and is adapted to co-operate with said internal face so as to form a nozzle for discharging liquid through said orifice in an atomized spray pattern, wherein said device comprises a cup which forms a connection between the eductor tube and the container cover, said cup being provided with means for co-operating with said valve-unit closure member and with at least one orifice for the flow of air through said cup into the interior of the container.

Compl. Specn. 27 pages.

Drgs. 5 sheets.

CLASS : 128-G.

161985

Int. Cl. : A 61 b 1/00.

## DEVICE FOR FIXING AN INTRAUTERINE CONTRACEPTIVE DEVICE TO THE UTRINE WALL.

Applicant & Inventor : WILDEMEERSCH, DIRK, OF VOSSENHUIJ, 8, B-8300 KNOCKE-HEIST, BELGIUM.

Application No. 687/Cal/84 filed September 27, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 20 Claims

A device for the insertion and the fixation of an intrauterine contraceptive device (IUD) to the uterine fundus or a female in the immediate post-partum or post-abortal period, which comprises :

a thread (10) affixed to the IUD (9; 40) and to a retaining member (10'; 14; 15; 19).

a needle (2; 26; 29; 44) for the insertion of the retaining member (10'; 14; 15; 19) attached to the thread into the uterine muscle,

a protecting member (4; 22; 33; 40) for the needle,

a receiving member (4; 22; 30; 41; 41') for the IUD,

an actuating member (3; 27; 31; 43) for the needle, movable with respect to the protecting member,

means (5, 6, 7; 25, 28; 35, 36; 48, 49) for temporarily locking the actuating member with regard to the protecting member,

characterized in that

the device extends backwards to form a gripping member (8; 25, 27; 32, 33; 47, 40),  
the retaining member (10'; 14; 15; 19) loosely engages the needle (2; 26; 29; 44),

means (4; 22; 30; 49) are provided for achieving and maintaining a traction on the thread (10), ensuring the co-operation of the retaining member (10'; 14; 15; 19) with the needle (2; 26; 29; 44) as long as the means (5, 6, 7; 25, 28; 35, 36; 48, 49) for locking the actuating member with regard to the protecting member are not disengaged and the IUD is not released from its receiving member (4; 22; 30; 41, 41').

Compl. Specn. 23 pages.

Drgs. 3 sheets.

CLASS : 176-I.  
Int. Cl. : F 22 b 37/00.

161986

#### SOLID-FUEL BOILER.

Applicant : ETABLISSEMENT PUBLIC DIT OF 9 AVENUE PERCIER, F-75008 PARIS, FRANCE.

Inventors : 1. GERARD GIRARDEAU, 2. JEAN POULEAU.

Application No. 835/Cal/84 filed December 4, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 6 Claims

Solid-fuel boiler, comprising :

- (a) a feed hopper (1),
- (b) an integrated furnace (2) with a fixed grate (3), a pushing device (4), a primary air inlet (5), a residue collector (6) and a roof (7), and
- (c) a heat exchanger (8), the said boiler being characterised in that the face (7A) of the roof (7) opposite the grate (3) is at least partially convex.

Compl. Specn. 7 pages.

Drgs. 2 sheets.

CLASS : 35-E.  
Int. Cl. : C 04 b 35/00.

161987

#### METHOD FOR THE MANUFACTURE OF BASIC GAS PERMEABLE REFRACTORY SHAPED ARTICLE.

Applicant : DALMIA INSTITUTE OF SCIENTIFIC & INDUSTRIAL RESEARCH, AND ORISSA CEMENT LIMITED, BOTH OF RAJ GANGAPUR 770017, DIST. SUNDARGARH, ORISSA.

Inventors : 1. DR. JAINYADATTA PANDA, 2. DR. NILACHAL SAHOO, 3. JAYANTA KUMAR SAHU.

Application No. 117/Cal/85 filed February 18, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 4 Claims

A method for the manufacture of basic gas permeable refractory shaped article which comprises preparing a raw mix of 70 to 95% by wt. of dead burnt magnesite or fused magnesite or a mixture thereof and 30 to 5% by wt. of a binding agent, intimately mixing the two ingredients with water to a mouldable consistency, moulding the wet mixture into desired shapes, drying the shaped masses and firing the dried masses at 1600°C to 1700°C characterised in that :

- (a) the said dead burnt magnesite or fused magnesite has a grading which will pass through a sieve of Y mm. opening and will retain on a sieve of X mm.

opening, the difference between X and Y being not less than 0.1 mm. and not more than 0.5 mm. and the maximum diameter of the sieve opening in case of Y is 2 mm. and the maximum diameter of the sieve opening in case of X is not less than 0.1 mm., and

- (b) the said binding agent comprises 0.5 to 5% by wt. of an organic binder and 29.5 to 5% by wt. of a refractory material which will give high melting silicate phase of the system CaO—MgO—SiO<sub>2</sub>.

Compl. Specn. 5 pages.

Drg. Nil.

CLASS : 6-A3.

161988

Int. Cl. : F 01 c 9/00.

#### A PISTON-OPERATED MACHINE.

Applicant : VAN MEEGEN CONSTRUCTIONS PTY. LTD. OF 31 FLETCHER STREET, GLADSTONE, QUEENSLAND, 4680, AUSTRALIA.

Inventor : 1. HENRIKUS ANTONIUS BERNARDUS VAN MEEGEN.

Application No. 495/Cal/85 filed July 2, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 9 Claims

A piston-operated machine including :

- a crank shaft having an intermediate crank section the axis of the crank section being oblique to the axis of the crank shaft and the crank section passing rotatable, about an axis parallel to the axis of the centre of the wobble plate lying on a prolongation of the axis of the crank shaft;
- a plurality of cylinders, their axes parallel to and equally spaced from the axis of the crank shaft;
- a piston in each cylinder mounted on a piston rod extending coaxially from the cylinder to a respective connection on the wobble plate space from its centre; each piston rod, at its said connection, being rotatably but non-slidably engaged in a member eccentrically rotatable, about an axis parallel to the axis of the cranks shaft, in a thrust plate mounted for rotation, about the same axis, in the wobble plate.

Compl. Specn. 11 pages.

Drgs. 2 sheets.

CLASS : 128-E.

161989

Int. Cl. : A 61 b 5/04.

#### A PORTABLE ELECTROCARDIOGRAM RECORDER.

Applicant & Inventor : GILLES ASCHER, OF 20B IS BOULEVARD DU GENERAL LECLERC 92200 NEUILLY SUR SEINE, FRANCE.

Application No. 714/Cal/85 filed October 10, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 9 Claims

A portable electrocardiogram recorder formed from a case containing a microprocessor device for the digital processing of signals taken by at least two electrodes in contact with the skin of the patient, one of the faces of application comprises projecting electrodes forming protuberances with respect to said face, said electrode comprising cavities whose shape is complementary to that of the studs of electrocardiogram electrodes fixed by adhesion

to the skin of the patient, thus ensuring both mechanical and electrical coupling, so that said case may be applied either directly to the skin of the patient or indirectly through said disposable electrodes.

Compl. Specn. 10 pages.

Drg. 1 sheet.

CLASS : 158-E.

161990

Int. Cl. : F 60 b 19/02.

**UNDERFLOOR WHHEEL SET BARRING MACHINE FOR RETREADING OF BIM CIRCUMFERENCES OF RAILROAD WHEEL SETS.**

Applicant : HOESCH AKTIENGESELLSCHAFT, OF EBERHARDSTRASSE 12, 4600 DORTMUND 1, WEST GERMANY.

Inventors : 1. DIRK BRINKMANN, 2. UWE GUTOHRLEIN.

Application No. 796/Cal/85 filed November 7, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

4 claims

Underfloor wheel set barring machine for retreading of the wheel rim circumferences of railroad wheel sets, with two dieven pairs of friction rollers each of which can be pressd against a wheel rim circumference of a wheel set, with the friction rollers of each pair of friction rolliers being arranges for single pivoting around a pivoting axis which is parallel to the axis of the wheel set, characterized in that a rotary drive means (17, 18) is arranged with each pair of friction rollers (11, 12), which drive means has a motor (51, 52) a distributor gear (57, 58) consisting of two belt drives, (53, 54, 55, 56) and two spur gear systems (59, 60, 61, 62).

Compl. Specn. 7 pages Drgs. 5 sheets.

CLASS : 62-E.

161991

Int. Cl. C 11 d 3/00, 10/00.

**PROCESS TO MANUFACTURE A PHOSPHATE FREE DETERGENT PRODUCT FOR WASHING OF TEXTILES IN HARD WATER AND PHOSPHATE-FREE DETERGENT COMPOSITION FOR USE THEREIN.**

Applicant : DE BLAUWE LIER B.V., OF 'S GRAVENWEG 111, 3062 ZC ROTTERDAM, THE NETHERLANDS.

Inventor : 1. GWENDOLEN BROWNE.

Application No. 598/Cal/83 filed May 12, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

8 claims

A process to manufacture a detergent composition substantially free of phosphates (phosphateless detergent product) for washing of textiles in hard water at a temperature of at the most 70°C, which comprises essentially mixing two parts (a) and (b) characterised in that : part (a) comprises :

- (a) at least one watersoluble inorganic salt as herein described derived from carbondioxide, inclusive hydrates, perhydrates and percarbonates thereof, facultatively mixed with additives known for use in detergents and formed into powder, granulates, tablets or extruded products. part (b) comprises :
- (b) at least one acidic compound as herein described which does not form a precipitate with calcium and magnesium ions in hard water at usual dosage facultatively mixed with additives known for use in detergents and formed into powder, granulates, tablets or extruded products.

at least one surface active compound as herein described which does not form a precipitate with calcium and magne-

sium ions in hard water at usual dosage, is added to either part a or part b, at least one of the parts (a) and (b) being separated from the other one by a known watersoluble coating, impregnation or some other way of physical separation, the ratio of part (a) and part (b) being such that a 0.5% by weight solution thereof in a washing liquor will maintain the pH within the range of 5 to 8.

Compl. Specn. 18 pages. Drg. nil.

CLASS : 55-E; 69-X<sub>2</sub> b.

161992

Int. Cl. A61k 31/00.

**A METHOD OF PREPARING MUTEIN OF BIOLOGICALLY ACTIVE PROTEIN.**

Applicant : CETUS CORPORATION, AT 1400 FIFTY-THIRD STREET, EMERYVILLE, CALIFORNIA 94608, UNITED STATES OF AMERICA.

Inventors : 1. DAVID FU-CHE MARK, 2. LEO SHUN LEE LIN, 3. SHI-DA YU LU.

Application No. 1282/Cal/83 filed October 19, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Calcutta.

23 claims

A method of preparing a mutein of a biologically active protein having at least one dysteine residue which is free to form a disulfide link and is nonessential to said biological activity, characterized by mutationally altering the protein by deleting the cysteine residue or by replacing the cysteine residue with another amino acid is carried out by culturing a recombinant host cell or organism that has been transformed with an expression vector that includes a structural gene that encodes the synthetic mutein, or progeny of said cell or organism and harvesting the synthetic mutein from the culture.

Compl. Specn. 38 pages. Drgs. 13 sheets.

CLASS : 190-B.

161993

Int. Cl. F 01 d 5/00.

**A BLADE ASSEMBLY AND METHOD OF FORMING SAME.**

Applicant : WESTINGHOUSE ELECTRIC CORPORATION, OF WESTINGHOUSE BUILDING, GATEWAY CENTER, PITTSBURGH, PENNSYLVANIA 15222, UNITED STATES OF AMERICA.

Inventors : 1. ALBERT JOSEPH PARTINGTON  
2. RONALD EUGENE WARNER.

Application No. 1337/Cal/83 filed October 29, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Calcutta.

5 claims

A blade assembly consisting of a plurality of rotatable blades to be disposed in a circular array on a stream turbine rotor, said blades comprising a root portion which fastens said blades to said rotor, an air foil shaped blade portion having a leading edge and a trailing edge and a shroud portion made integral with the blade portion and disposed on the radially outer end of the blade portion, said portion and disposed on the radially outer end of the blade portion, said shroud portion having a first planar surface and a second planar surface, the first planar surface being disposed substantially parallel to an axial radial plane passing through the central portion of the root portion, in which the second planar surface is extended forming an angle with said axial plane substantially equal in degrees to 360 divided by the number of blades forming said circular array, and in which the first planar surface extends slightly beyond the blade portion of blades.

Compl. Specn. 8 pages. Drg. 1 sheet.

CLASS : 179-G.

161994

Int. Cl. A 45 d 33/02; B 65 d 83/06, 83/14.

## DISPENSERS FOR LIQUIDS AND POWDERY SUBSTANCES.

Applicant : SPBP TEA INDUSTRIES PVT. LTD. OF 20 BRITISH INDIAN STREET, 2ND FLOOR, CALCUTTA-700 069, WEST BENGAL, INDIA.

Inventor : 1. MAYANK KUMAR.

Application No. 30/Cal/84 filed January 12 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Calcutta.

8 claims

A dispenser for a liquid or a powdery substance comprising a hollow body made of a resilient deformable material for holding the substance and a closure member having a flange, a nozzle extending from the flange in one direction and a skirt or socket extending from the flange in the other direction and fitting within the mouth of the said body, characterised in that at least one set of mutually engaging ridge and grooves is provided on the outer periphery of the said skirt or socket and the internal periphery of the mouth of the said body.

Compl. Specn. 8 pages. Drgs. 2 sheets.

CLASS : 129-M.

161995

Int. Cl. B 23 d 17/00.

## PARTIAL-CUT CUTTING MACHINE.

Applicant : VOEST-AIPINE AKTIFNGESELLSCHAFT OF A-1011 VIENNA, FRIEDRICHSTRASSE 4, AUSTRIA.

Inventors : 1. GERALD ALTGAJER, 2. ALFONS SMOLNIKER, 3. HERMANN MAIER, 4. BERNHARD EBNER.

Application No. 177/Cal/84 filed March 12, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Calcutta.

12 claims

Partial-cut cutting machine comprising a loading ramp for the heap of cut debris and a universally pivotable cutting arm, characterized in that at least at one side of the cutting machine, a boom (6) swivelling at least in the horizontal direction is pivotally linked to the loading ramp or to the frame of the cutting machine, said boom being equipped with a continuous conveyor.

Compl. Specn. 10 pages. Drg. 1 sheet.

CLASS : 206-E.

161996

Int. Cl. H 04 n 5/00.

## A CIRCUIT FOR TELEVISION RECEIVING SETS.

Applicant : DEUTSCHE THOMSON-BRANDT GMBH, HERMANN-SCHWER-STR. 3 POST-BOX 2060, D-7730, VILLINGEN-SCH WENNINGEN/FRG, FEDERAL REPUBLIC OF GERMANY.

Inventor : 1. GERHARD MAIER.

Application No. 278/Cal/84 filed April 27, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Calcutta.

2 claims

A circuit for television receiving sets for amplification and transduction of VHF and UHF signals into an intermediate frequency signal with an HF input stage provided for each range, a mixing stage, a band selector adjusted to the intermediate frequency and an intermediate-frequency amplifier characterised in that the intermediate-frequency amplifier, (9) is connected via an impedance transformer (13) to the outputs of the intermediate-frequency band selectors (5, 8) in such a manner that the outputs of the intermediate-frequency band selectors (5, 8) are connected to the input of the impedance transformer (13) via decoupling diodes (10, 11) that can be connected through alternatively by the operating voltages for the VHF/UHF stages (2, 4, 4, 6, 7).

Compl. Specn. 7 pages. Drg. 1 sheet.

CLASS : 98-E.

161997

Int. Cl. F 28 d 1/00.

## A ROTARY REGENERATIVE HEAT EXCHANGER.

Applicant : THE AIR PREHEATER COMPANY, INC., OF ANDOVER ROAD, WELLSVILLE, NEW YORK, UNITED STATES OF AMERICA.

Inventor : 1. RICHARD FRANKLIN STOCKMAN.

Application No. 408/Cal/84 filed June 14, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Calcutta.

4 claims

Rotary regenerative heat apparatus having a cylindrical rotor shell and a central rotor post, a plurality of imperforate diaphragms connecting the rotor post to the rotor shell to form a series of sector shaped compartments therebetween, a mass of heat absorbent material carried in each compartment of the rotor, a cylindrical wall concentrically dividing the rotor into an inner passageway and an outer passageway, means for rotating the rotor about its axis, a housing surrounding the rotor including a pair of sector plates at opposite ends of the rotor extending radially to separate a hot gas stream from a secondary air stream flowing axially through the rotor, a pair of stub sector plates in the secondary air stream, and circumferential sealing means extending arcuately to join ends of stub sector plates to define a passageway for a high pressure primary air stream that is substantially enclosed by the secondary air.

Compl. Specn. 6 pages. Drg. 1 sheet.

CLASS : 146-B &amp; C.

161998

Int. Cl. B 43 l 13/00.

## OUT LINE DRAWING INSTRUMENT OF PLANE.

Applicant &amp; Inventor : SAIBAL ROY, 47, MANICKTOLA, MAIN ROAD, CALCUTTA-700054, INDIA.

Application No. 555/Cal/84 filed August 6, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Calcutta.

3 claims

A device for drawing reduce and similar boundary lines of any surface, which comprises a, flat, inextensible, flexible tape, a gear train, a rack carrying a pen or pencil, a wheel a roller, all being mounted with their holders on an axle having any shape of cross-section which is vertical to the plane of a horizontal drawing board fixed with the base of the device, and the said axle passes through the aforesaid drawing board and capable of rotation about a vertical axis in itself and consequently all the aforesaid components being mounted to said axle rotates with axle in parallel horizontal planes.

Compl. Specn. 7 pages. Drg. 1 sheet.

CLASS : 145-D.

161999

Int. Cl. D 21 f 7/00.

## APPARATUS FOR CONTROLLING TENSION IN A WINDER FOR PAPER OR OTHER WEB.

Applicant : BELOIT CORPORATION, OF P.O. BOX 350,  
BELOIT WISCONSIN 53511, UNITED STATES OF AMERICA.

Inventors : 1. ROBERT GRUNDY LUCAS.

Application No. 836/Cal/84 filed December 4, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Calcutta.

## 4 claims

Apparatus for controlling tension in a winder for paper or other web comprising, a first roller in engagement with said web to measure vertical loads a first bearing support means rotatably supporting said first roller and formed with a horizontal surface, a base member formed with a horizontal surface, a first flexible support means having a first horizontal leg mounted to the horizontal surface of said base member and said first flexible support means having a second horizontal leg and said horizontal surface of said first bearing support means connected to said second horizontal leg, a first strain gauge load cell with one side mounted on said first horizontal leg of said first flexible support means and with its other side in contact with said second horizontal leg so as to measure vertical loads on said roller, and said first and second legs joined together by flexible portion which has a reduced cross-section so as to allow flexure of said first and second legs, wherein said central portion has a reduced cross-section which has an opening which is semi-cylindrical in shape wherein said load cell produces an electrical output and an infinitely variable tension control means engages said web and receives the electrical output of said load cell.

Compl. Specn. 9 pages. Drgs. 2 sheets.

CLASS : 190-B.

162000

Int. Cl. F 02 c 7/00.

## AXIAL-FLOW GAS TURBINE.

Applicant : PROIZVODSTVENNNE OBIEDINENIE "TURBOMOTORNY ZAVOD IMENI K.E. VOROSHOLOVA" OF SVERDLOVSK ULITSA FRONTOVYKH BRIGAD, 18, USSR.

Inventors :

1. PAVEL AFANASIEVICH KUMKOV,
2. ARNOLD PETROVICH KOLCHANOV,
3. VALERY IVANOVICH STEPANENKO,
4. ANATOLY VASILIEVICH ALEXEEV,
5. PAVEL VASILIEVICH AZITSEV,
6. DMITRY IVANOVICH SEREDJUK,
7. NIKOLAI TERENTIEVICH SOKOL.

Application No. 543/Cal/85 filed July 22, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 3 claims

An axial-flow gas turbine comprising in flow series a means for feeding washing liquid thereto, a contractor and a blading, in which the means for feeding washing liquid incorporates a diaphragm disposed at the inlet of the contractor and having at least one channel a cross-section area and a length of which are sufficient for coagulation of dust particles with washing liquid droplets in a gas flow, and a washing liquid atomizer arranged along an axis of the axial flow gas turbine upstream of the diaphragm at distance

$$L = \frac{D}{2K \tan \frac{\alpha}{2}}$$

where  $L$  is the distance between the atomizer and the diaphragm

$D$  is the diameter across the outer edges of the diaphragm channel;

$K$  is the empirical coefficient equal to 0.2-0.7;  
 $\alpha$  is the spray-cone angle of the atomizer.

Compl. Specn. 18 pages. Drg. 1 sheet.

CLASS : 70-B.

162001

Int. Cl. G 01 n 27/00.

## PROCESS FOR PRODUCING A CATHODE HAVING HIGH DURABILITY AND LOW HYDROGEN OVERVOLTAGE.

Applicant : ASAHI GLASS COMPANY LIMITED, OF 1-2, MARUNOUCHI 2-CHOME, CHIYODA-KU TOKYO, JAPAN.

Inventors : 1. YOSHIO ODA, 2. HIROSHI OTOUMA, 3. FIJI ENDON.

Application No. 863/Cal/83 filed July 13, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 10 claims

A process for producing a cathode having high durability and low hydrogen overvoltage, which comprises applying onto an electrode substrate such as herein described an electro-chemically active alloy comprising Component X selected from the group consisting of nickel, cobalt and a mixture thereof, Component Y selected from the group consisting of aluminium, zinc, magnesium and silicon, Component Z selected from a noble metal and rhodium, and having a composition falling within the range defined by the following points A', B', C' and D' with reference to the diagram of Figure 4, of the accompanying drawings

by depositing particles of said alloy on the electrode substrate by a composite coating method such as herein described or forming a uniform layer of said alloy on the electrode substrate by a coating method, a dipping method, a sintering method or an electroplating method,

$$\begin{aligned} A' &: X=59.8 \text{ wt. \%}, \\ B' &: X=39.8 \text{ wt. \%}, \\ C' &: X=5 \text{ wt. \%}, \\ D' &: X=12 \text{ wt. \%}, \\ Y &= 40 \text{ wt. \%}, \\ Y &= 60 \text{ wt. \%}, \\ Y &= 60 \text{ wt. \%}, \\ Y &= 40 \text{ wt. \%}, \\ Z &= 0.2 \text{ wt. \%}, \\ Z &= 0.2 \text{ wt. \%}, \\ Z &= 35 \text{ wt. \%}, \\ Z &= 48 \text{ wt. \%}. \end{aligned}$$

Compl. Specn. 27 pages. Drg. 3 sheets.

CLASS : 68-E.

162002

Int. Cl. : G 01 r 23/16.

## THREE PHASE THIRD HARMONIC CURRENT INJECTION TESTER.

Applicant : C.F.S.C. LTD. VICTORIA HOUSE, CALCUTTA-700001, INDIA.

Inventor : 1. MR. SUBRATA BISWAS.

Application No. 1330/Cal/83 filed October 28, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 3 Claims

A Three Phased Third Harmonic Current Injection Tester which comprises three toroidal cores with primary windings connected in star and fed by a phase regulated three-phase sinusoidal current source, and with secondary windings connected in delta; three mixing CTs, one for each phase and having three windings, one set of windings being connected in series with the delta connected windings of the aforesaid toroidal cores along with a variable low resistance, the second set of windings being connected to another three-phase sinusoidal current source connected to a common three-phase supply so that the phase difference between the outputs of the two current sources can be maintained at a set value and controlled by a phase shifter or regulator contained in the former, and the third set of windings constituting the three-phase output circuit that can deliver upto 50 amps of mixed waveform through the high ampere test meters/applications, in which fundamental and third harmonic components can be present in a set ratio and phase relationship; and three measuring CTs connected in the aforesaid 50 amps circuit which can deliver three phase current upto 5 amps of mixed waveform through substandard energy meters or wattmeters, ammeters, shunt operated C.R.O. and low ampere test meters/applications, all connected in series, in which fundamental and third harmonic components can again be present in a similarly set ratio and phase relationship.

Compl. Specn. 13 pages.

Drg. 2 sheets.

CLASS : 143-D; 189.

162003.

Int. Cl. A 47 k 5/00, 5/12; A 45 d 40/00; B 65 d 75/40, 85/72.

**MULTIPLE LAYER FLEXIBLE SHEET STRUCTURE USABLE IN FLEXIBLE TUBES.**

Applicant : AMERICAN CAN COMPANY, OF AMERICAN LANE, GREENWICH, CONNECTICUT 06830, UNITED STATES OF AMERICA.

Inventor : 1. JOHN P. ECKSTEIN.

Application No. 1555/Cal/83 filed December 20, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 12 Claims

A multiple layer sheet structure usable in flexible tubes wherein the layers are firmly adhered to each other to make a unitary structure, said layers comprising in order :

- (A) an exterior heat sealable layer made predominantly of low density polyethylene;
- (B) a first adhesive layer made predominantly of ethylene acrylic acid;
- (C) a barrier layer made of thin metal foil;
- (D) a second adhesive layer made of a similar material as the said first adhesive layer;
- (E) a second exterior layer made of a similar material as the said first exterior layer, a layer of oriented polypropylene being preferably included between the said layers D & E, wherein said second adhesive layer and said second exterior layer acting in an adhesive capacity being effective collectively to join said oriented polypropylene into the structure with good adhesion.

Compl. Specn. 21 pages.

Drg. 1 sheet.

CLASS : 40-F.

162004.

Int. Cl. B 01 j 1/00.

**CLOSED APPARATUS WITH POTENTIAL FLUIDIZATION FOR HORIZONTALLY CONVEYING POWDER MATERIALS.**

Applicant : ALUMINIUM PECHINEY, OF 23, RUE BAL-ZAC 75008 PARIS, FRANCE.

Inventors : 1. JEAN-PASCAL HANROT, 2. JACKY VOLPELIERE.

Application No. 291/Cal/84 filed May 1, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 7 Claims

A closed potential fluidization apparatus, for conveying powder materials in a dense bed from a storage region (31) to at least one region to be fed therewith, comprising a storage means (48) for storing the powder material, referred to as a reserve container, which comprises between the two regions at least one horizontal conveyor (33) formed by a lower duct (35) for a flow of gas, an upper duct (36) for a flow of the powder material and the gas, between which ducts is disposed a porous wall (34), and at least one conduit (38) for feeding gas to the lower duct, which makes it possible to establish a pressure  $P_f$  that creates a dense potential-fluidization bed of the powder material that fills the conveyor, by virtue of the presence of at least one balancing column (39), the filling height (56) of which balances the pressure  $P_f$  of the potential-fluidization gas characterised in that the closed storage means or reserve container (48) of the region to be supplied with material, being provided with means (47) for introducing and means (51) for removing the powder material, is also provided with at least one opening (52) disposed above the limit level of filling with powder material, which opening establishes an equilibrium in respect of pressures between the inside and the outside of said reserve container.

Compl. Specn. 18 pages.

Drg. 1 sheet.

CLASS : 175-H.

162005.

Int. Cl. F 02 f 3/00.

**INTERNAL COMBUSTION ENGINE PISTON.**

Applicant : PERKINS ENGINES GROUP LIMITED OF 35 DAVIES STREET, LONDON W1Y 2EA, ENGLAND.

Inventor : 1. PHILLIP ALBERT HENRY JANE.

Application No. 435/Cal/84 filed June 21, 1984.

Convention dated 28th June, 1983. (8317453) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 6 Claims

An internal combustion engine piston having a combustion bowl recessed in the crown of the piston and a plurality of recesses formed in the side wall of the bowl so as to extend substantially the full depth of the bowl and which are arcuate in cross-section and spaced apart by arcuate intermediate portion of the side wall, characterised in that the ratio of the maximum distance by which each recess (7) extends radially into the side wall (6) compared with the radius of the side wall (6), lies within the range 0.10 to 0.20.

Compl. Specn. 12 pages.

Drg. 9 sheets.

CLASS : 50-D.

162006

Int. Cl. : F 25 d 31/00.

**COOKING TOWER MONITOR.**

Applicant : THE BABCOCK & WILCOX COMPANY, AT 1010 COMMON STREET, NEW ORLEANS, LOUISIANA 70160, UNITED STATES OF AMERICA.

Inventor : 1. AMIT KAYA, 2. ALAN CHARLES SOMMER.

Application No. 3/Cal/85 filed January 1, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 5 Claims

A cooling tower monitor for determining the performance of a cooling tower having a hot water inlet, a cold water outlet and airflow means for producing an air flow through the tower, comprising :

- wet bulb temperature means for determining the wet bulb temperature of air outside the tower;
- available water flow means connected to said wet bulb temperature means for calculating available flow of water from the tower as a function of rating factor and tower unit at standard conditions as well as cold water outlet temperature, hot water inlet temperature and air flow through the tower;
- a first temperature transmitter connected to said available water flow means for supplying a signal corresponding to the cold water outlet temperature;
- a second temperature transmitter connected to said available water flow means for supplying a hot water inlet temperature;
- an air flow transmitter connected to said available water flow means for supplying an air flow value;
- a water flow transmitter for generating a signal corresponding to an actual flow of water out of the tower; and
- a performance value generator connected to said available water flow means and said water flow transmitter for calculating a performance value of the cooling tower as a function of the available and actual water flow out of the tower.

Compl. Specn. 15 pages.

Drgs. 4 sheets.

CLASS : 167-C.

162007

Int. Cl. : B 07 b 1/00.

## VIBRATORY GRAIN SORTING MACHINE.

Applicant : SATAKE ENGINEERING CO. LTD., OF 19-10, UENO-1-CHOME, TAITO-KU, TOKYO, JAPAN.

Inventor : I. TOSHIHIKO SATAKE.

Application No. 112/Cal/85 filed February 15, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 28 Claims

A vibratory grain sorting machine comprising :

a frame having opposed side walls and a bottom wall extending there between;

at least one stack of sorting plate members each of which has a roughened upper surface, said stack of sorting plate members being fixedly mounted on said frame so that the roughened upper surfaces of the respective sorting plate members are spaced from each other, each of said sorting plate members being inclined in a three-dimensional manner with respect to a horizontal plane so as to have an upper side edge, a lower side edge, an upper end and a lower end of a discharging grain, the respective upper side edges extending along one of said side walls of said frame and the respective lower side edges extending along the other side wall of said frame;

a base structure;

a plurality of strut units supporting, on said base structure, an assembly to be vibrated at least including said frame and said stack of sorting plate members fixedly mounted thereon so that said assembly to be vibrated is movable relative to said base structure and that a first intersecting line between said bottom wall and said one side wall of said frame is located above a second intersecting line between said bottom wall and said the other side

wall of said frame, at least one of said strut units having a top end pivotally connected to said the other side wall of said frame at a location between upper and lower ends of said the other wall and a bottom end pivotally connected to said base structure, each of the remaining strut units having a top end pivotally connected to an area, adjacent to said first intersecting line, of said bottom wall of said frame and a bottom end pivotally connected to said base structure;

supplying means for supplying a mixture of a first kind of grain and a second kind of grain having a specific gravity different from that of said first kind of grain on to the roughened upper surfaces of the respective sorting plate members at the upper ends of the respective sorting plate members, to allow said mixture to flow toward the lower ends of the respective sorting plate members;

vibrating means fixedly mounted relative to said base structure and connected to said frame for applying a force to said assembly to be vibrated, substantially toward and away from a center of gravity thereof, to angularly reciprocate the assembly to be vibrated around the bottom ends of the respective strut units, to thereby enable a stream of the first kind of grain, a stream of the second kind of grain and a stream of mixture of the first and second kinds of grain to be separately formed on the roughened upper surface of each of said sorting plate members, while the supplied mixture is flowing toward the lower ends of the respective sorting plate members; and

collecting means for separately collecting the stream of the first kind of grain, the stream of the second kind of grain and the stream of the mixture from the lower end of each of said sorting plate members.

Compl. Specn. 41 pages.

Drgs. 6 sheets.

CLASS : 107-G.

162008

Int. Cl. : F 01 p 11/00.

## AN AUTOMOBILE SECURITY DEVICE.

Applicant : MRS. CHETTOOR NARAYANI VIKARA, 76A, NEW ALIPORE, FLAT NO. 22, BLOCK E, CALCUTTA-700 053, WEST BENGAL, INDIA.

Inventor : I. ANANDA MOHAN VIKARA.

Application No. 584/Cal/85 filed August 12, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 6 Claims

An automobile security device comprising an electronic circuit fitted in the automobile characterised in that a coded command is transmitted from an alphanumerical key board mounted in the driver's cabin to an electronic processor and control unit fitted in the engine compartment for receiving the coded signal, said signal operating a relay which 'breaks' or 'makes' the LT circuit of the ignition coil a petrol driven engine and thus disables or enables the engine.

Compl. Specn. 8 pages.

Drgs. 2 sheets.

CLASS : 69-A.

162009

Int. Cl. : H 01 h 1/00.

## CIRCUIT BREAKERS.

Applicant : WESTINGHOUSE ELECTRIC CORPORATION, OF WESTINGHOUSE BUILDING, GATEWAY CENTER, PITTSBURGH, PENNSYLVANIA 15222, UNITED STATES OF AMERICA.

Inventors : I. ALFRED EUGENE MAIER, 2. JAMES RICHARD FARLEY.

Application No. 653/Cal/85 filed September 16, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 15 Claims

An electrical circuit breaker comprising a first electrical contact, a second electrical contact, spring-powered operating means for moving said first and second electrical contacts into engagement and out of engagement, trip means for actuating said operating means comprising, a trip bar rotatably mounted within said circuit breaker, a thermally actuuated bimetal having a portion thereof movable about a pivot point toward and away from said trip bar in response to predetermined overload conditions, a formed intermediate control lever physically distinct from said bimetal for adjusting the position of the movable portion of said bimetal relative to said trip bar, said intermediate control lever being mechanically coupled to said bimetal at a location adjacent said pivot point, and a rotatable calibration adjustment component for adjusting the spatial disposition of said intermediate control lever in said circuit breaker, said calibration adjustment component having a threaded portion that is in threadable engagement with a stationary part of said trip means and said calibration adjustment component also being of such length that an end thereof engages said intermediate control lever at a location remote from said pivot point so that rotation of said calibration adjustment component causes said intermediate control lever to pivot and to adjust the spatial disposition of the movable portion of said bimetal relative to said trip bar.

Compl. Specn. 33 pages.

Drgs 9 sheets.

CLASS : 69-P.

162010

Int. Cl. : H 02 b 1/00.

### SWITCHGEAR APPARATUSES:

Applicant : WESTINGHOUSE ELECTRIC CORPORATION, OF WESTINGHOUSE BUILDING, GATEWAY CENTER, PITTSBURGH, PENNSYLVANIA 15222, UNITED STATES OF AMERICA.

Inventor : 1. FRED BOULD.

Application No. 812/Cal/85 filed November 15, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 8 Claims

Switchgear apparatus comprising a cell, a plurality of spaced fixed terminal stabs in the cell, a switchgear unit removably disposed in the cell and including terminal means for detachably engaging the terminal stabs during movement into and out of the cell, a barrier of electrically insulative material comprising first shutter having opening means for receiving the stabs, support means for movably mounting the shutter between positions of nonalignment and alignment of the opening means with the stabs and biased in the non-alignment position, obstruction means retractably mounted in the path of movement of the shutter for barring movement of the shutter from the nonalignment position, and the unit comprising trigger means for releasing the obstruction means when the unit moves into the cell so as to retract the obstruction means from the path of movement of the shutter to enable the opening means to align with the stabs and to enable connection of the terminal means with corresponding stabs.

Compl. Specn. 11 pages.

Drgs. 5 sheets.

CLASS : 155 F 1 & F 2 [XXIII].

162011

Int. Cl. : DO 6m-11/00.

IMPROVEMENTS IN OR RELATING TO THE METHOD OF MANUFACTURING TEXTILE FABRIC HAVING DURABLE ANTI-PERSPIRATION ODOUR, ANTIBACTERIAL AND HYGENIC FINISH.

Applicant & Inventor : RAKESH VALLABHDAS TIWARI.

Application No. 105/Bom/1985. Filed on 22nd April, 1985.

Complete after provisional left 16th April, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

### 2 Claims

1. An improved method of manufacturing textile fabric having durable antiperspiration odour, antibacterial and hygenic finish, said method comprising :

- (i) impregnating bleached textile fabric with a polymer composition consisting of 8.5—12 parts of metallic salt such as herein described, 2-3 parts of crosslinking agent such as herein described, 3.5—5 parts of non-ionic softening agent such as herein described, 1.5—2.5 parts of organic acid such as herein described and 10—15 parts of hydrogen peroxide and remaining parts of water to make up 100 parts at a pH between 3.5—5.5;
- (ii) drying the fabric at a temperature between 90—100°C;
- (iii) and polymerising the fabric by curing at a temperature between 110°—120°C.

Compl. Specn. 6 pages.

Drg. Nil.

Provl. Specn. 5 pages.

Drg. Nil.

CLASS : 129 G+F.

162012

Int. Cl. : B23 C-1/00.

### A MACHINE FOR CUTTING PROFILES.

Applicant & Inventor : PYNADATH THOMAS JOY, INDIAN NATIONAL, OF MAROL ANDHERI (EAST), BOMBAY-400 059, MAHARASHTRA, INDIA.

Application No. 114/Bom/85. Filed on 27th April, 1985.

Complete after provisional left on 14th October, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

### 3 Claims

1. A machine for cutting profiles and particularly cutting worm shafts, worm wheels, idle rollers, spherical finishes, "O" rings and the like profiles comprising : a body frame with a motor driven chuck to hold a work piece or tool; a tail stock whose centre is in line with the axis of rotation of the chuck shaft; a pedestal having screw and bearing arrangement, resting on the body frame in between the said chuck and the tail stock, adapted to move forward and backward at 90° to the axis of the chuck shaft, on turning the said screw the acid screw passes through a threaded opening in a vertical shaft, mounted on a bottom bearing fixed to the said pedestal and on a top bearing fixed to a projection of a work table, the said work table rests on a ring plate bolted to the column of the said pedestal and having a ring table surrounding the column of the pedestal below the said ring plate, the said column also accommodates in an opening, a splined shaft mounted in brackets with bearings, fixed to the body frame, the said splined shaft passes freely through an opening in the said vertical shaft and fixed with a vevel gear engaging to another vevel gear mounted on the said projection of the work table.

Provl. Specn. 4 pages.

Drg. Nil.

Compl. Specn. 12 pages.

Drgs. 4 sheets.

CLASS : 981.

162013

Int. Cl. : F24— 3/02.

AN IMPROVED NON-TRACKING SOLAR COLLECTOR FOR HEATING WATER AND THE LIKE FLUIDS.

Applicant & Inventor : DARRYL DAVID RODRIGUES, AN INDIAN CITIZEN, BLUE HEAVEN, TPS IV, 1ST ROAD, BANDRA, BOMBAY-400 050, MAHARASHTRA, INDIA.

Application No. 193/Bom/1985 filed on 23rd July, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

#### 6 Claims

An improved non-tracking solar collector for heating water and the like fluids comprising a box like frame fitted with one or more sea-shell shaped trough connected in series or in parallel, each of said trough being made from sheet metal, the upper surface thereof being adhesively stuck with highly reflective aluminium foil or metallized polyester film and bottom surface thereof being adhesively stuck with heat insulating material such as expanded polystyrene, asbestos wool, glass fiber wool, cork, saw dust, vermiculite, straw board, sugarcane bagasse and the like; a solar absorber provided inside the said trough formed from extruded metal section having a longitudinally extending seat for fixing thereto a copper pipe having an inlet and an outlet for circulation of free flowing liquids therethrough from an overhead storage tank or a pump connected to said inlet in known manner, and said absorber is provided with plurality of longitudinally extending spaced corrugations extending along the length of said absorber for increasing the surface area exposed to sunlight and having both sides painted with heat absorbant matt finish paint such as black paint, fitted at right angle to a gasket sealed transparent glazing, covering the said trough the said frame being provided with a front leg pair shorter than the rear leg pair and the said rear leg pair is having adjustable bolts for adjusting the angle of solar collector with respect of horizontal line x-x to obtain maximum exposure to sunlight.

Compl. Specn. 8 pages.

Drg. 1 sheet.

CLASS : 98 I.

162014

Int. Cl. : F24j-3/02.

AN IMPROVED NON-TRACKING SOLAR COLLECTOR FOR HEATING WATER AND THE LIKE FLUIDS.

Applicant & Inventor : DARRYL DAVID RODRIGUES, AN INDIAN CITIZEN BLUE HEAVEN, TPS IV, 1ST ROAD, BANDRA, BOMBAY-400 050, MAHARASHTRA, INDIA.

Application No. 196/Bom/1985 filed on 25th July, 1985. [PATENT OF ADDITION TO 193/BOM/85 DATED 23rd July, 1985]

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

#### 2 Claims

An improved non-tracking solar collector for heating water and the like fluids as claimed in claim 1 of my main copending patent application No. 193/Bom/1985 wherein the improvement resides in the said solar absorber plate being mounted horizontally and in spaced parallel relationship with transparent gasket insulated glazing covering the top open face of said sea-shell shaped collector in place of vertically positioned absorber plate to increase efficiency of solar absorption and radiation, whereby heating of said fluid is accelerated.

Compl. Specn. 5 pages.

Drg. 1 sheet.

CLASS : 160 D.

162015

Int. Cl. : B 62 d-21/00.

AN EIGHTEEN TONNE CHASSIS-LESS TRAILER FOR DETACHABLY FIXING THERETO TANKER SHELL AND THE LIKE.

Applicant : Mahindra Owen Limited, an Indian Company duly registered and incorporated under Companies' Act & having its Registered Office at 155, Bombay-Pune Road, Pimpri, Pune-411 018, Maharashtra, India.

Inventor : RAULF AUGUSTO NORONHA.

Application No. 203/Bom/85 filed on 6th August 1985.

Complete after provisional left on 2nd September, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

#### 10 Claims

An eighteen-tonne chassis-less trailer for detachably fixing thereto tanker shell and the like comprises of a kingpin plate assembly for detachably fixing thereto a pair of mounting brackets at front end of the tanker shell by nut-bolt means, a pair of synchronised lift jacks detachably fixed to a middle support member formed of a transversely extending cross member plate having means for clamping thereto mounting brackets of the tanker shell near its middle, and an under carriage frame having suspension assembly carrying a pair of tandem mounted axle assemblies fitted with hubs for fixing thereto pneumatic tyred wheels, each of said hub having a combination of known type of hydraulically and mechanically operated brake means respectively operated by hydraulic master cylinder assembly provided at front end of said king-pin plate assembly and by a hand wheel on brake lever provided near rear end of said under carriage frame and wherein said under-carriage frame is having a plurality of clamp plates on its top, each having means for detachably fixing mounting brackets of the tanker shell by nut-bolt means in the usual manner and wherein said under-carriage frame substantially resembles a ladder-like structure as shown in Fig. 4 of the drawings accompanying the Complete specification.

Prov. Specn. 5 pages.

Drgs 4 sheets.

Compl. Specn. 11 pages.

Drgs. 4 sheets.

Inc. Cl. 160D.

162016

Int. Cl. B 62d—21/00.

A TEN-TONNE CHASSIS-LESS TRAILER FOR DETACHABLY ATTACHING THERETO A TANKER SHELL AND THE LIKE FOR TRANSPORTING LIQUID PETROLEUM PRODUCTS AND THE LIKE.

Applicant : MAHINDRA OWEN LIMITED, AN INDIAN COMPANY DULY REGISTERED AND INCORPORATED UNDER COMPANIES' ACT AND HAVING ITS REGISTERED OFFICE AT : 155 BOMBAY PUNE ROAD, PIMPRI PUNE-411018, MAHARASHTRA, INDIA.

Inventor : RAULF AUGUSTO NORONHA.

Application No. 208/BOM/85. Filed on Aug 6, 1985.

Complete after provisional left on September 2, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

#### 9 Claims

1. A ten-tonne chassis-less trailer for detachably attaching thereto a tanker shell and the like for transporting liquid petroleum products and the like comprising a kingpin plate assembly having means for clamping thereto mounting brackets of a tanker shell at its front end, a pair of synchronised lift jacks detachably fixed to transversely extending

cross member plate having means for clamping thereto mounting brackets of the tanker shell near its middle and an under-carriage frame having suspension assembly carrying a single axle assembly fitted with hubs for fixing thereto pneumatic tyre wheels, each of said hubs having a combination of known type of hydraulically and mechanically operated brake means respectively operated by a hydraulic piston/cylinder assembly on said king-pin plate assembly and by a hand wheel fitted on brake lever located near rear end of said under-carriage frame having plurality of clamp plates at its top, each having means for detachably fixing thereto mounting brackets at the rear end of the tanker shell by nut-bolt means in the usual manner and the said under-carriage frame is formed from a pair of longitudinally extending sections welded in spaced and parallel relationship with each other by three transverse cross members welded in spaced relationship with other and wherein the rearmost of said transverse cross member is longer than the other two cross members and is extended on both sides of the said longitudinally extending sections and said rearmost cross member is further strengthened by a pair of angular braces—one on each side thereof so as to form a ladder-like frame as shown in Fig. 4 of the drawings accompanying the complete specification.

Provisional specification 6 pages.

Drawing 4 sheets.

Complete specification 11 pages.

Drawing 4 sheets.

Inc. Cl. 179B

162017

Int. Cl. B 67 C—3/12, B 67 d—5/08, 5/30.

#### A MACHINE FOR FILLING LIQUID CONTENTS IN BOTTLES OR LIKE CONTAINERS.

Applicant & Inventor : VISHWAJIT VISHWANATH NAGARKAR RESIDING AT 1073, SAHAKAR NAGAR, PADMAVATI, PUNE-9 (PIN CODE 411 009), MAHARASHTRA, INDIA.

Application No 234/BOM/1985. Filed on Sept. 2, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay.

#### 2 Claims

A machine for filling liquid contents in bottles or like containers comprising an overhead liquid tank connected to an actuating valve assembly below it through a pipe line having a drain valve, the said valve assembly is connected to a master cylinder through a central pipe and having near the bottom a discharge pipe, the said master cylinder is provided with a vent pipe being projected inside the said central pipe connected at the bottom most part of the cylinder; the actuating valve assembly is provided with a sliding plunger fitted at the top of a plunger rod projecting from a plate and guided through hole/s provided in one or more guide/s, the said plate is having a central opening for aligning and centering the bottles to be filled with the discharge pipe, the said bottles being placed over a table or support connected to a lever mechanism, arrangement being such that the liquid flows from the overhead tank into the master cylinder under gravity pressure which stops automatically at a desired level when the pressure of the air trapped in the master cylinder equals the pressure in the liquid tank and on pressing the pedestal of the lever mechanism the bottle is lifted to align with the discharge pipe and at the same time the plunger is lifted up above the central pipe thus allowing the liquid filled in the said master cylinder to discharge into the said bottle and on releasing the pressure from the pedestal the plunger moves below the said central pipe and liquid again starts automatically filling into the said master cylinder.

Comp. Specn. 9 pages.

Drg. 2 sheets.

Ind. Cl. : 9D [XXXIII(1)] + 33 H [XXXIII(3)]. 162018  
Int. Cl. : C 22 C 37/04.

AN IMPROVED APPARATUS FOR THE PRODUCTION OF SPHEROIDAL GRAPHITE OR COMPACTED CAST IRON AND A PROCESS FOR THE PRODUCTION OF SPHEROIDAL GRAPHITE OR COMPACTED CAST IRON USING THE SAID APPARATUS.

Applicant : DR. SHILOBHADRA BANERJEE, PROFESSOR METALLURGICAL ENGINEERING DEPT., INDIAN INSTITUTE OF TECHNOLOGY BOMBAY, POWAI, BOMBAY-400 076, MAHARASHTRA, INDIA.

Application No. 263/Bom/1985 filed October 3, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

#### 9 claims

An apparatus for producing spheroidal or compacted cast iron by treating a molten cast iron, comprises of a furnace (ladle) and a plunger filled in with magnesium or magnesium alloy or other low boiling alkali metals characterised in that the plunger consists of a rod having a plunger head at its lower end which may or may not be perforated at its lower end and is adapted to be closed and opened, the said rod is also adapted to move freely up and down the furnace (ladle) through an annulus formed in the sleeve attached to the cover of the furnace (ladle), a plug or cover being provided at the bottom of the plunger head which may or may not be perforated depending on the plunger head is perforated or not and the said plunger head also being adapted to be pressed against the cover or plug at the bottom of the furnace (ladle).

Compl. Specn. 15 pages; Drg. 1 sheet.

CLASS : 61E [VIII], 40E [IV (1)].

162019

Int. Cl. B01d—53/26.

AN APPARATUS FOR THE RECOVERY OF LIQUOR FROM AIR-MOISTURE MIXTURE PRODUCED IN A VACUUM HYDRO EXTRACTOR.

Applicants : PRIMATEX MACHINERY PRIVATE LTD., DHANRAJ MAHAL, CHHATRAPATI SHIVAJI MAHARAJ MARG, BOMBAY-400 039, MAHARASHTRA, INDIA.

Inventors : (1) NITIN SHANTILAL MEHTA AND (2) MADHUKAR MURLIDHAR CHANDEKAR.

Application No. : 288/Bom/1985 filed October 17, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

#### 2 claims

An apparatus for the recovery of liquor from air-moisture produced in a vacuum-hydro-extractor, the apparatus being in two parts the upper part called the separator vessel having a separator, being pad of wire gauze or meshes or like material, dividing it in two compartments the bottom compartment having a port whereby it receives air-liquor-mixture from a vacuum hydro-extractor and having an opening at its bottom, the upper compartment having a port connected to a vacuum pump, said separator transforming the moist passing through it into droplets of liquor and allowing only air to pass through it, the liquor droplets collecting at the bottom of the lower compartment, the lower compartment having below its bottom the lower part called valve body having guided and supported float valve just below the opening in the bottom of the lower compartment of the separator vessel and having an opening in the bottom of the valvebody, below which opening is provided a non-return valve supported on a helical spring located in a valvebody, the valvebody having high level and low level sensors, a three-port solenoid valve, one port being connected to the valvebody under the float valve, the exhaust port being connected to the separator vessel and the third port being connected to a regulated air supply line.

Compl. Specn. 5 pages. Drg. 1 sheet.

Ind. Cl. : 95K [XL III (2)] 162020  
 Int. Cl. B 25b—13/10, 13/28, 13/30.  
 A CAM-TYPE PIPE—WRENCH.

Applicant & Inventor : NIRMAJ PANNALAL, C/O. PAN-  
 NALAL MITAL, INDUSTRIES, BADORA, BETUL,  
 MADHYA PRADESH, INDIA.

Application No. : 344/Bom/1985 filed on 18 Dec. 1985.

Patent of Addition to 258/Bom/83 filed on August 20,  
 1983.

Appropriate office for opposition proceedings (Rule 4,  
 Patent Rules, 1972), Patent Office, Bombay Branch.

3 claims

(1) A cam-type pipe-wrench as claimed in claim 1 of my  
 main Patent No. 158036, wherein the said 'C' shaped jaw is  
 improved or modified into an 'L' shaped jaw pivotally attach-

ed to the cam-lever, the said 'L' shaped jaw having one limb  
 curved and serrated inwardly and the other limb being a  
 straight singular shank is provided with a through hole at  
 distal and thereof for receiving a pivot pin therethrough; and  
 the cam-portion of said cam-lever is also modified to have  
 two interspaced identical flanges serrated on the faces of said  
 cam-portion, and provided with a plurality of holes allowing  
 different attachment positions of said 'L' shaped jaw between  
 the said two interspaced identical flanges of said cam-lever by  
 said pivot-pin.

Compl. Specn. 5 pages. Drgs. 2 sheets.

#### PATENTS SEALED

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 159610 159614 159615 159616 159617 159618 159619 159622  
 159623 159624 159625 159626 159627 159628 159629 160525

#### STATEMENT REGARDING LICENCE AGREEMENTS OF PATENTS REGISTERED UNDER SECTION 68 FOR THE PERIOD OF JULY, 1987 TO DECEMBER, 1987.

##### FROM INDIAN TO INDIAN

Patent No.	Patentee	Licence Granted to	Licence Granted on	Entry made Under section	Entry on
1	2	3	4	5	6
145250 . . . . .	National Research Development Corporation of India, New Delhi, India	Neeraj Kumar Agrawal of M/s Ferro Cement India	22-12-86	68	10-07-87
145250 . . . . .	"	Sri Pawan Chetal Sasderjung Enclave New Delhi, India	24-06-86	68	22-07-87
145250 . . . . .	"	Sri Ashutosh Goel of Structural Engineering Corporation, New Delhi, India	01-04-87	68	17-08-87
144000 . . . . .	"	G. Nigam of M/s. Seema Chemicals, Bombay	05-02-85	68	22-07-87
150816 . . . . .	"	M/s. S. R. Goel & Associates, Roorkee India.	24-06-86	68	21-07-87

#### STATEMENT REGARDING ASSIGNMENTS OF PATENTS REGISTERED UNDER SECTION 68 FOR THE PERIOD OF JULY, 1987 TO DECEMBER, 1987.

##### FROM INDIAN TO INDIAN

Patent Nos.	Patentee	Assignment to	Assigned on	Entry made under section	Entry made on
1	2	3	4	5	6
150048 . . . . .	Appan Prambath Aboobacker Kerala, India	1. Cherokkadath Yoosuf 2. Mutunthala Md. Safi both of Kerala, INDIA	25-05-87	69	21-09-87
156339 . . . . .	Jyoti Prasad Mukherjee, Maharashtra, India.	J. P. Mukherjee and Associates Pvt. Ltd., Poona, India	28-07-87	68	27-11-87

140142 140187 140654 140836 141053 141083 141786 143417  
 143973 144729 144950 145900 146017 146146 146265 147304  
 147556 147831 148118 148281 148328 148421 148428 148872  
 149178 149330 149331 149503 149638 149844 149925 150182  
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 150834 150903 150948 151030 151090 151127 151258 151774  
 152282 152296 152297 152467 152580 152587 152617 152670  
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 153418 153419 153589 153624 153631 153760 153764 153781  
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 154879 154949 155101 155189 155236 155357 155586 155620  
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 156608 156610 156626 156665 156694 156770 156789  
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 158914 158938 158939 158954 158977 159036 159055 159709  
 159093 159105 159109 159125 159126 159149 159152 159158  
 159171 159172 159178

#### REGISTRATION OF DESIGNS

The following design have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

Class. 1. No. 158350. Khaitan (India) Limited, an Indian Company of 46-C, J. L. Nehru Road, Calcutta-700 071, West Bengal, India, "Top Cover of Ceiling Fan Motor Body". 22nd May, 1987.

Class. 1. No. 158590. Societe Anonyme "Establishment Vape" a limited concern, of 51 Rue Rene Nicod 01100, Oyonnax France. "Screws for Fixing Railway Rails to Sleepers". 30th July, 1987.

Class. 1. No. 158742. Duraware Pvt. Ltd., 21 A-24A, Additional M.I.D.C. Aurangabad Road, Jalna 431 203, Maharashtra State, India, A Subject of the Republic of India. "A Frying Pan". 28th August, 1987.

Class. 3. No. 158288. Khaitan Chemicals Limited, an Indian Company of B-522, Industrial Area, Bhawali Distt. Alwar, Rajasthan, India. "Bottle". 30th April, 1987.

Class. 3. Nos. 158556, 158557. Choksons Private Ltd. an Indian Company of Saki Vihar Road P.O. Box-8443, Powai, Bombay-400072, Maharashtra and also at Tavawala Building, Pathak Wadi, Bombay-400002, Maharashtra, India. "3-Pin Plug Top". 20th July, 1987.

Class. 4. No. 158568. M/s. National Council For Cement & Building Materials, M-10 South Extension, Part-II, Ring Road, New Delhi-110049, India, a body under the Government of India. "Fibre Reinforced Concrete Jacket". 22nd July, 1987.

*Extn. of Copyright for the Second period of five years.*  
 No. 153665—Class-1.

No. 153307—Class-3.

*Extn. of Copyright for the Third period of five years.*  
 No. 153665—Class-1.

R. A. ACHARYA  
 Controller General of Patents,  
 Designs and Trade Marks